SUMTER COUNTY BOARD OF COMMISSIONERS
EXECUTIVE SUMMARY

SUBJECT: C466W Preliminary Engineering Study (PES) from C475 to US301 (staff recommends approval)

REQUESTED ACTION: **Board approval of Alternative 1**

☐ Work Session (Report Only) **DATE OF MEETING:** 11/8/2011
☒ Regular Meeting ☐ Special Meeting

CONTRACT: ☐ N/A Vendor/Entity: Kimley-Horn and Associates

Effective Date: _____ Termination Date: _____
Managing Division / Dept: Public Works/Engineering

BUDGET IMPACT: NA
☐ Annual **FUNDING SOURCE:**
☐ Capital **EXPENDITURE ACCOUNT:**
☒ N/A

HISTORY/FACTS/ISSUES:
In April 2010 the BOCC contracted with KHA to conduct a Project Development and Engineering (PD&E) study of C466W from C475 to US 301. Subsequently, the requirement for the PD&E was converted to a PES as the need for an interchange at C475 and I-75 slipped beyond the planning horizon.

On September 20, 2011 the BOCC received a briefing on the PES and the alternatives, with Alternative 1 being recommended. Alternative 1 has two sections:

1. West of CR209 the road will be milled and resurfaced with travel lanes widened to 12' and 2' paved shoulders added; it will remain a typical rural section with open drainage.
2. East of CR209 the road will be a typical urban section with 3 lanes (one 12' lane in each direction with a center 12' turn lane) and bicycle lanes.

The section west of CR209 has already been designed and will be reconstructed in FY12 using an FDOT CIGP grant for $1.625M which the BOCC has already approved.

The section east of CR209 will be designed and permitted in FY12 unsing impact fees, with the RFP being posted in the near future, and ROW and construction planned for the out years.

KHA has finalized the PES and an executive summary is attached for BOCC review and approval. The complete PES with all appendices is available for review at PWD.

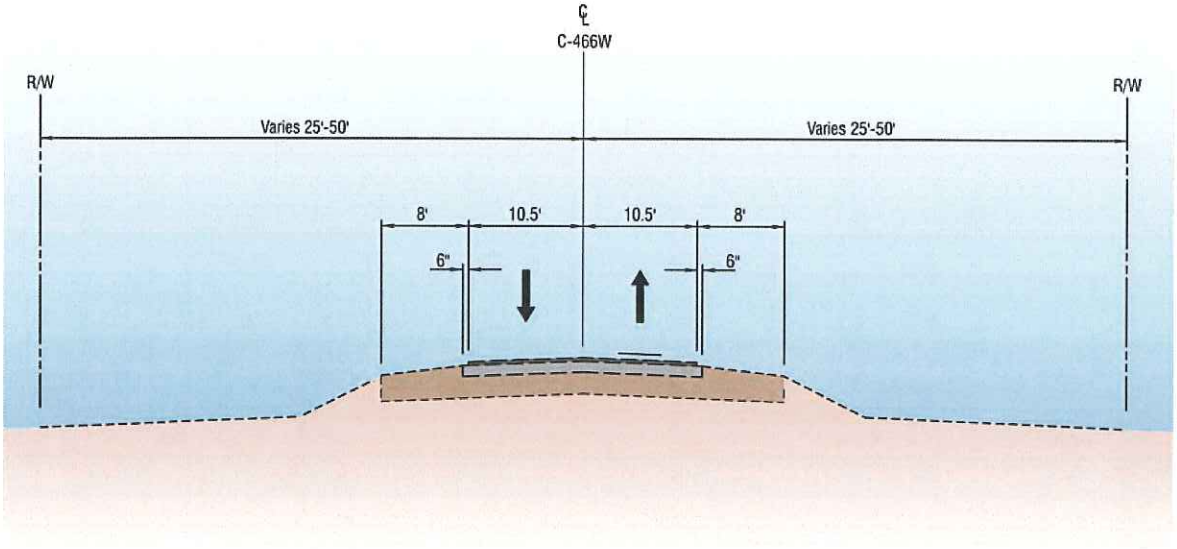
Staff recommends formal approval of the PES.

Study Overview

Kimley-Horn and Associates, Inc. was originally retained by Sumter County in April 2010 to perform a Project Development and Environment (PD&E) Study for C-466W from C-475 to US 301 (SR 35). The purpose of the PD&E was to study the reconstruction of C-466W and to determine the future roadway geometry needs based on projected traffic volumes. Although C-466W is a local Sumter County roadway, the project began as a PD&E to satisfy FHWA requirements to be eligible for federal funds, should they become available. The purpose and need for the roadway widening was largely due to the proposed interchange at C-466W & I-75. An interchange at this location is identified as a need in the Lake-Sumter Metropolitan Planning Organization's (MPO) 2035 Long Range Transportation Plan (LRTP), but is ranked at the lowest priority. In June 2011, the County decided to postpone pursuing state or federal funds for the PD&E to a time closer to the construction of the C-466W / I-75 interchange. Therefore, this study continued as a Preliminary Engineering Study (PES).

C-466W is currently a two-lane undivided transitioning major county collector roadway within the study area, with narrow lanes (10.5 feet) and no paved shoulders. The existing typical section is illustrated in ***Figure 1*** below.

Figure 1 – Existing Typical Section



The existing two-lane roadway section is not sufficient to meet traffic capacity and mobility needs within the 2035 planning horizon. Improvements to C-466W within the study area are anticipated to promote safety by bringing the roadway to current design standards, reduce operating costs by reducing congestion, improve traffic operations, and improve multi-modal travel through the inclusion of bicycle lanes and sidewalks.

The PES developed design concepts based on engineering analysis and evaluated the social, economic, and environmental effects of the recommended alternative. Public input was solicited through public meetings, presentations, and stakeholder coordination meetings. ***Table 1*** summarizes the major project milestones.

Table 1: Project Milestones

Milestone	Date
Project Start Date	April 28th, 2010
Public Alternatives Meeting	October 13th, 2010
Lake-Sumter MPO TAC Presentation	February 9th, 2011
Lake-Sumter MPO BPAC Presentation	February 10th, 2011
Draft PES Report Submittal	September 13th, 2011
Sumter County BOCC Workshop Presentation	September 20th, 2011
Final PES Report Submittal	September 28th, 2011

Corridor Alternatives

The PES evaluated three alternatives: No-Build (do nothing), Build Alternative 1 (considers no interchange at I-75/C-466W), and Build Alternative 2 (considers an interchange at I-75/C-466W). The study focused on the preferred Build alternative, which is Alternative 1. However, supporting documentation is also provided for Build Alternative 2, for planning purposes should the construction of the interchange move forward within the planning horizon.

Build Alternative 1 is the recommended typical section to satisfy the 2035 future travel demand based on the presumption that the interchange at C-466W & I-75 will not be constructed within the study timeframe. From C-475 to CR 209, the proposed typical section includes resurfacing and rehabilitation to increase the existing typical section to have one 12-foot travel lane in each direction and a two-foot paved shoulder. The roadway will remain a rural section, with open swale drainage. The recommended alternative roadway section will be contained within the provided right-of-way from C-475 to CR 209. ***Figure 2*** illustrates the proposed typical section for Build Alternative 1, from C-475 to CR 209.

From CR 209 to US 301, the proposed typical section will have two 12-foot travel lanes (one lane in each direction) separated by a two-way left turn lane, paved bicycle lanes and sidewalks. Right-of-way will be required for the roadway between CR 209 to US 301, since the existing roadway ROW narrows to 50 feet in this area. The proposed roadway section is an urban section with closed drainage. Right-of-way will also be required for two drainage retention areas. ***Figure 3*** illustrates the proposed typical section for Build Alternative 1, from CR 209 to US 301.

Figure 2 – Build Alternative 1 Typical Section from C-475 to CR 209

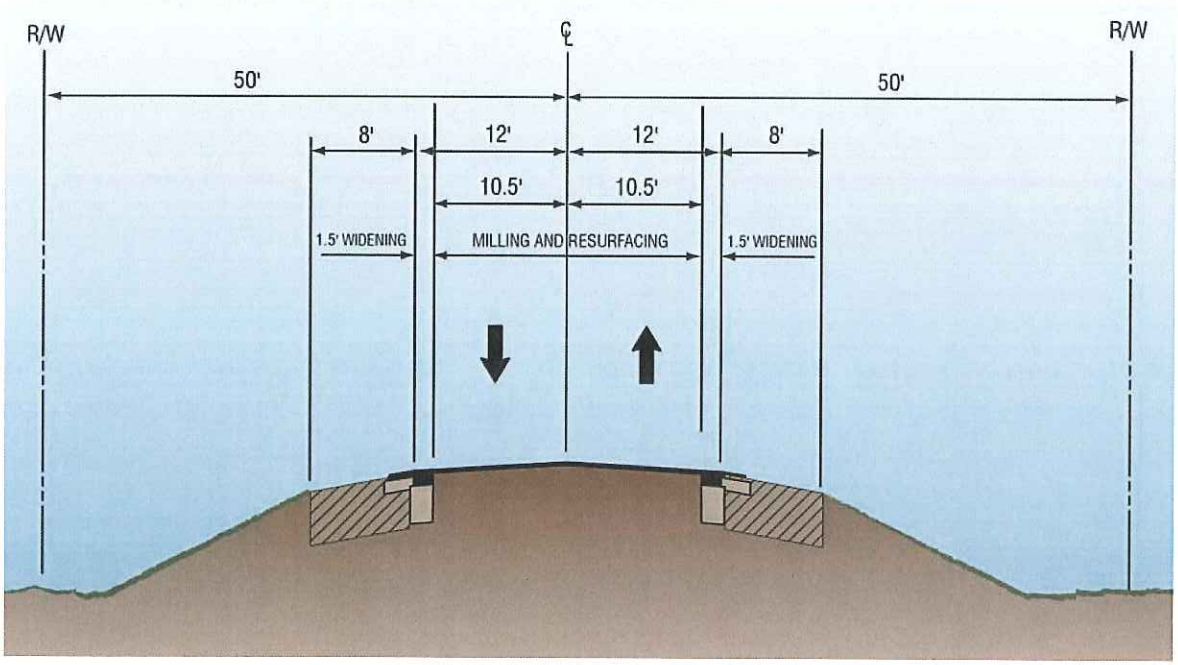
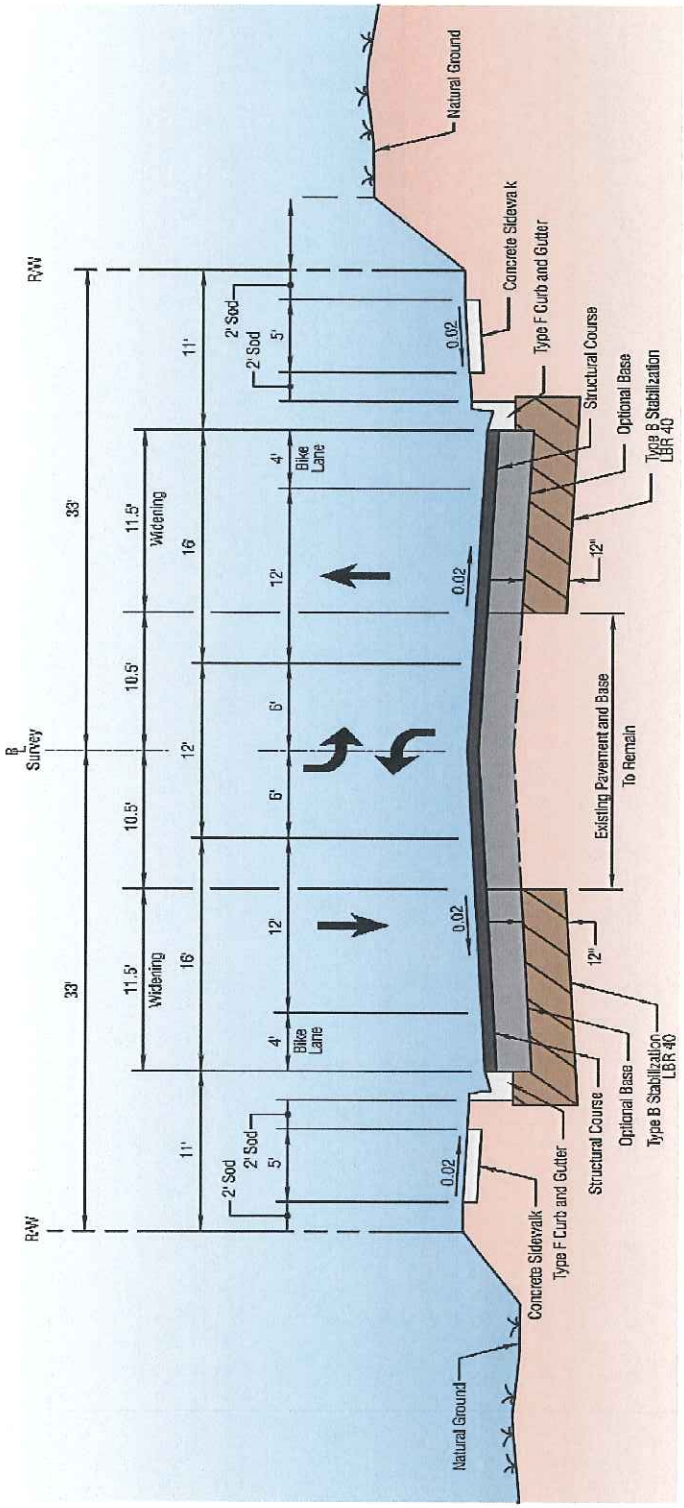


Figure 3 – Build Alternative 1 Typical Section from CR 209 to US 301



Build Alternative 2 is the recommended typical section to satisfy the 2035 future travel demand if the interchange is built within the study timeframe. For this scenario, a four-lane roadway will be needed to accommodate the future travel demand. The recommended typical section will improve the current two-lane roadway section to have four 12-foot travel lanes (2 lanes in each direction) separated by left turn lanes, bicycle lanes and, from CR 209 to US 301, sidewalks. The recommended alternative roadway section will be contained within the provided right-of-way from C-475 to CR 209, other than minor right-of-way needed for the curve at station 50+00. Additional right-of-way is needed between CR 209 and US 301 to accommodate the proposed typical section. A total of approximately 22 acres of right-of-way would be required from 37 properties.

The No-Build Alternative and Build Alternative 2 were presented at the Public Alternatives meeting in October 2010. The majority of the public was in favor of the project, and several were eager to know when construction would start. Comments included items dealing with drainage concerns, access management, proposed right-of-way, and the provision of bike lanes. The access management concerns are removed with Build Alternative 1. In addition, Build Alternative 1 will require significantly less right-of-way and property impacts when compared to Build Alternative 2 while still satisfying the long-term travel demand of the corridor.

Preferred Alternative

Through the public process, the Build Alternative was chosen as the Recommended Alternative. Since the interchange will likely not be built within the planning horizon, Build Alternative 1 was chosen as the Preferred Alternative. A preliminary engineering study was prepared documenting the design and decision process. The Preferred Alternative was presented at the Sumter County Board of County Commissioners Workshop on September 20th, 2011 where they agreed for Kimley-Horn to finalize the study with the Preferred Alternative. In summary, the Preferred Alternative:

- Improves the existing roadway by bringing it to current design standards,
- Benefits users and improves safety by increasing capacity and reducing congestion,
- Provides bicycle lanes and sidewalks,
- Requires approximately 5 acres of right-of-way from 19 parcels,
- Estimated $4.35 Million cost for design, right-of-way acquisition, and construction-related cost.

The exhibits on the following pages illustrate the Preferred Alternative. The complete Preliminary Engineering Report may be viewed at the Public Works office.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

Kimley-Horn and Associates, Inc.
Certificate Of Authorization No. 696
JONATHAN D. THIGPEN, P.E.
P.E. LICENSE No. 57611
1823 SE FORT KING STREET, SUITE 200
OCALA, FLORIDA 34471

SUMTER COUNTY
PUBLIC WORKS DIVISION

ROAD NO.	COUNTY	WORK ORDER NO.
C-466W	SUMTER	23

ALTERNATIVE 1
PLAN (01)

SHEET NO. 7

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REVISIONS			
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PUBLIC WORKS DIVISION

ROAD NO.	COUNTY	WORK ORDER NO.
C-466W	SUMTER	23

ALTERNATIVE 1
PLAN (02)

SHEET NO. 8

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PUBLIC WORKS DIVISION

ROAD NO.	COUNTY	WORK ORDER NO.
C-466W	SUMTER	23

ALTERNATIVE 1
PLAN (03)

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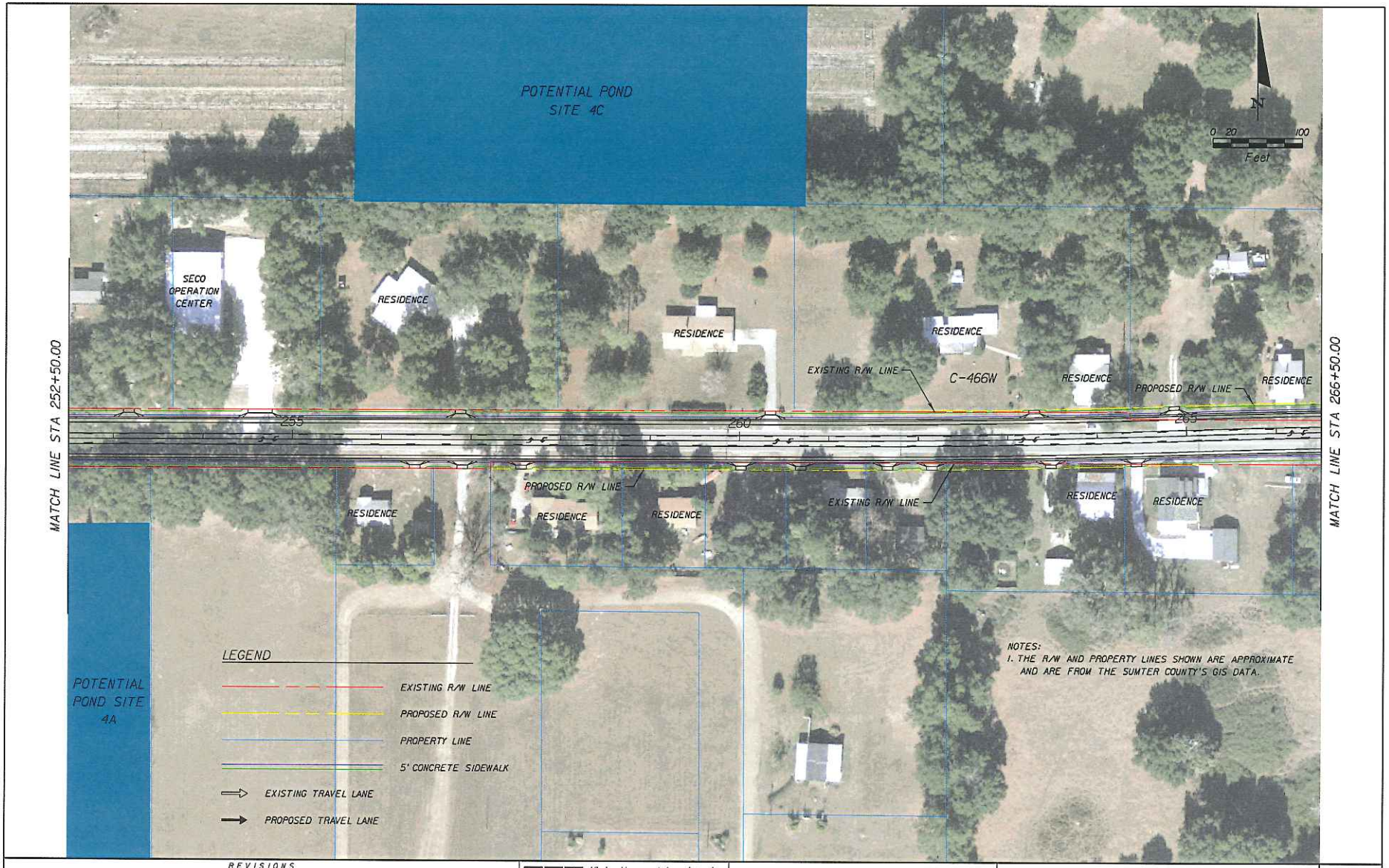

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ALTERNATIVE 1
PLAN (04)

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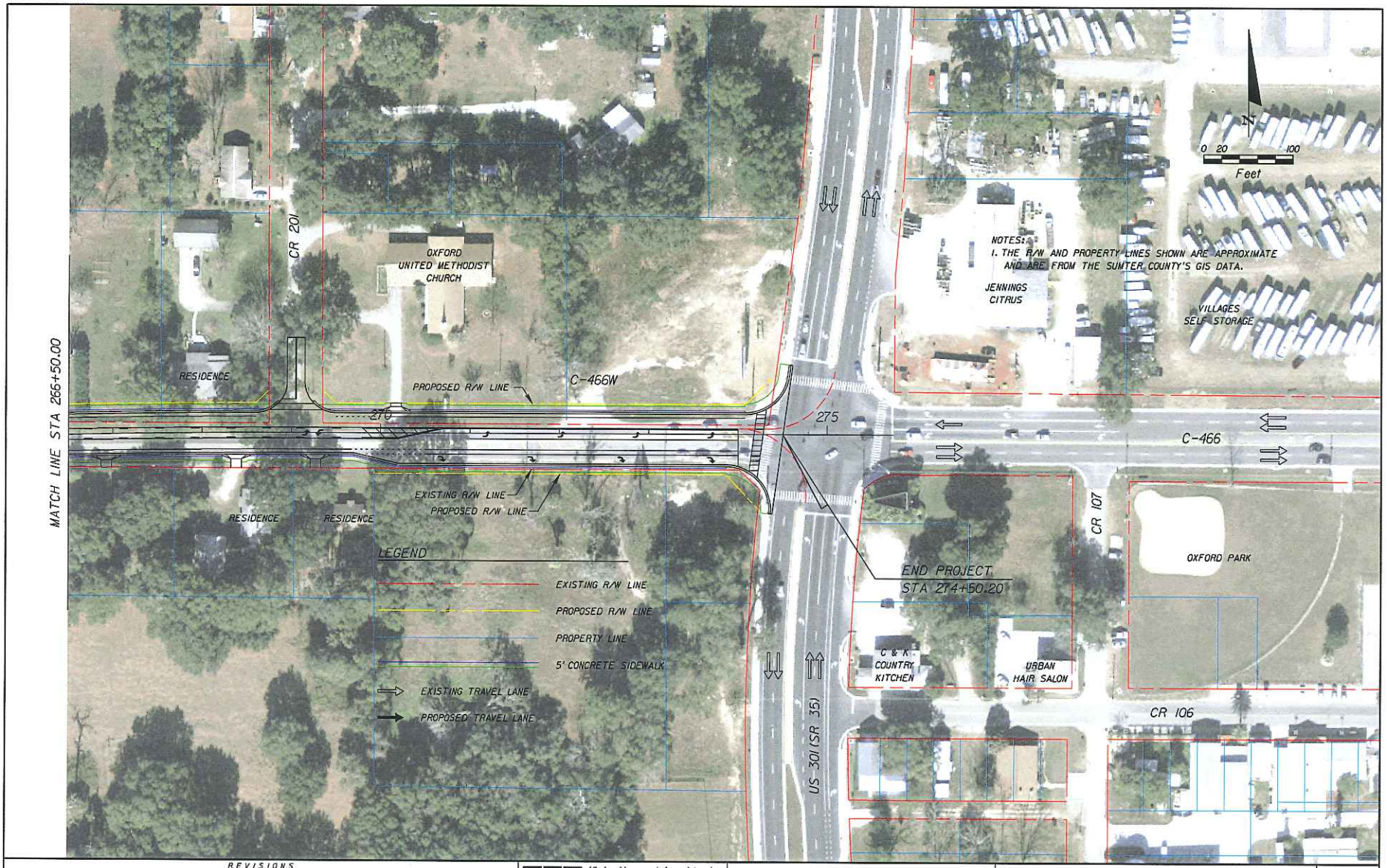

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SUMTER COUNTY
PUBLIC WORKS DIVISION

ROAD NO.	COUNTY	WORK ORDER NO.
C-466W	SUMTER	23

ALTERNATIVE 1
PLAN (05)

SHEET NO. 11

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